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ADOPTION OF THE REPORT OF THE COMMITTEE ON ITS SIXTH SESSION

Draft report

Addendum

Rapporteur: Mr. Anatoliy G. KOUPRIYAN (Ukraine)

Chapter ___

OPENING AND INTRODUCTORY STATEMENTS

1. The Director-General for Development and International Economic Cooperation opened the sixth session of the Committee on the Development and Utilization of New and Renewable Sources of Energy. In his statement, he said that the sixth session of the Committee was taking place on the tenth anniversary of the adoption of the Nairobi Programme of Action for the Development and Utilization of New and Renewable Sources of Energy. As requested by the Committee at its fifth session, the Intergovernmental Group of Experts on New and Renewable Sources of Energy, which met at United Nations Headquarters from 26 to 30 August 1991, under the Chairmanship of Eduardo Praselj of Venezuela, had submitted to the Committee a comprehensive report (A/AC.218/1992/9). In that report, the Group of Experts had made a comprehensive evaluation of progress achieved during the 1980s and, more important, had provided a set of recommendations for action at the national and international levels in order to accelerate the implementation of the Nairobi Programme of Action.

2. Much had changed in the world energy situation since the adoption of the Nairobi Programme of Action. Programmes and policies, initiated during the first half of the 1980s, aimed at energy conservation and efficiency and the promotion of new and renewable sources of energy, had been scaled down after the 1986 collapse in oil prices and their subsequent stabilization at lower levels. The rate of growth of world energy demand had since then accelerated, particularly in the developing countries. At the same time, global environmental concerns had intensified, especially with regard to the contribution of carbon dioxide, through the use of fossil fuels and deforestation, to the greenhouse effect. In many developing countries, deforestation and denuding of the countryside resulting from increased use of fuelwood had created a crisis of major magnitude and intensity with far-reaching social, economic and environmental consequences. A solution to the rural energy problem deserved high priority.

3. Despite set-backs, there had been a discernible increase in the application and use of technologies to harness new and renewable sources of energy in many developing countries. However, their world-wide contribution had remained stable at about 14 per cent of world energy supplies. That contribution was, however, much higher in many developing countries and had reached 60 to 70 per cent in many regions.

4. The Director-General drew the attention of the Committee to the recommendations of the United Nations Solar Energy Group on Environment and Development, under the Chairmanship of Thomas B. Johansson of Sweden. The Group had prepared a report entitled "Solar Energy: a strategy in support of environment and development" (see A/AC.218/1992/5 and Add.1), which was before the Committee. Among other recommendations, the Group called for the establishment of an international solar energy agency.

5. Steps should be taken to strengthen national institutions for new and renewable sources of energy and linkages among them should be established, as recommended by the Castel Gandolfo Colloquium, for the organization of an international network of centres of excellence. An important aspect of international cooperation in the development of new and renewable sources of energy related to the transfer of technology. Although relevant activities had been continuing in that area over the years through bilateral as well as multilateral cooperation, much remained to be done.

6. In closing, the Director-General informed the Committee that the General Assembly was considering the establishment of a new expert committee named "Committee on New and Renewable Sources of Energy and on Energy for Development". Governments were of the opinion that the work of the United Nations in that critical area would thereby be strengthened. He suggested that the current session of the Committee focus on the report of the United Nations Solar Energy Group on Environment and Development (see A/AC.218/1992/5 and Add.1) and the report of the Intergovernmental Group of Experts on New and Renewable Sources of Energy (A/AC.218/1992/9). Under the proposed change, which had yet to be approved by the General Assembly, the new expert committee would meet for two weeks every two years.

7. The Special Coordinator for New and Renewable Sources of Energy said that the issue of energy should be considered in the long-term perspective. To continue to link the development of new and renewable sources of energy to the fluctuations of the oil market was not very convincing and unfair to the 2.7 billion human beings who had only limited access to commercial sources of energy. He stated that currently, unlike in 1981, when the Nairobi Programme of Action had been adopted, public opinion attached great importance to the protection of the environment and to the threats to the planet. Current energy consumption constituted an extremely heavy burden on the environment. Nuclear energy could not replace other forms of energy as long as its use continued to give rise everywhere to mistrust and even rejection. In the light of that situation, the question to be asked was how to protect the environment without giving up economic development, which required abundant and reasonably priced sources of energy.

8. Sources of energy supply had to be diversified. Initially, that would call for decreased use of conventional sources of energy in global energy consumption in order to reduce gas emissions, soil deterioration, air and water pollution, acid rain and emissions of toxic substances. He said it was time to assess the environmental costs of the principal sources of energy in order to find better ways of preventing the continued degradation of the environment by promoting the use of cleaner energies. One source of energy that should be considered a viable alternative was solar energy. There had been repeated calls for the establishment of an international body to promote solar energy. There were active organizations at the national level. The idea of establishing an international body to coordinate action to promote solar energy deserved serious consideration.

9. The representative of the United Nations International Research and Training Institute for the Advancement of Women (INSTRAW), stressed that inadequate energy sources affected women in developing countries most severely and that women's involvement in collecting and disseminating those sources was not taken into account by policy makers. Women lacked education and training, as well as information, which prevented them from full participation in energy-related activities. A well-defined policy that involved women in the energy sector was a prerequisite for environmentally sound energy policies. The Institute focused on research and training at the national and regional levels to ensure women's involvement in renewable energy programmes. Multi-media training packages for development officials and women's organizations were central to that effort. In developing countries, as women were primary providers of household energy, they influenced the patterns and amount of energy consumed. In both cases, however, they suffered the consequences of declining sources and rising prices. The Committee should recommend that education and training on women and environmental issues be strengthened.

10. The representative of the Department of Technical Cooperation for Development, said that in the past the Department had undertaken numerous projects in the areas of solar, wind, biomass, hydropower and geothermal energies, and had also contributed to such other areas of new and renewable

energy development as the ocean, charcoal and draught-animal power energies. Taking into account financial implications, the Department played a major role in developing highly innovative projects in the field of photovoltaics through purely commercial channels.

11. The Department was also active in rural energy projects, which often involved demonstrations to determine which of the technologies were more appropriate and could be better applied to local needs. There was a need for establishing the appropriate local institutions and for drafting legislation to better meet the growing environmental crisis.

12. The representative of the Economic and Social Commission for Western Asia said that the Commission had undertaken a number of activities to develop renewable energy sources in the region. Those sources were particularly important to remote areas. Biogas technology was being promoted and a pilot biogas project had been undertaken in the 1980s in southern Yemen to demonstrate the benefits of biogas systems. Overall living standards, including local health standards, had improved owing to the systematic collection of waste, and the burden on women to collect firewood had decreased. A regional training workshop had been convened in the Syrian Arab Republic to build biogas digesters to produce energy for cooking. The technology held much promise for the region. Efforts had also been directed at establishing a regional information network on renewable energy to promote discussion of new ideas and the dissemination of information in the field. Research on solar, wind and biomass energy sources had been undertaken, and rural energy needs were under study. An assessment and review of the implementation of the Nairobi Programme of Action in the region was being conducted and a number of new pilot projects were being prepared with national, regional and international organizations.

13. The representative of the Food and Agriculture Organization of the United Nations (FAO) said that his organization continued to assist developing countries in such major areas as technology development and the formulation of energy strategies and plans for rural energy development. It had recently provided assistance in the latter field to such countries as China, Indonesia, Nigeria, the Philippines, Sri Lanka and Viet Nam, as well as to 10 Latin American countries. It continued with an intense field programme in various energy technologies.

14. FAO placed special emphasis in its activities to projects that contributed to sustainable and environmentally sound development, and hence was involved in various new and renewable sources of energy projects. Following the FAO/Netherlands Conference on Agriculture and the Environment, an international programme that included energy development in rural areas had been integrated into Agenda 21 of the United Nations Conference on Environment and Development. To address the growing concerns regarding the energy and environmental linkages, the role of the United Nations should be further consolidated. Inter-agency cooperation remained to be better developed and consolidated.

15. The representative of the United Nations Environment Programme (UNEP) said the Programme's first priority in the field of energy was to integrate consideration of environmental concerns, particularly greenhouse gas aspects, into energy policy world wide. UNEP had established a new centre in Denmark to promote environmentally conscious energy planning in developing countries. Its first collaborative policy study project was to develop an action plan for more environmentally sound energy programmes in India. Similar projects were under discussion with other Governments. An environmental database had been developed for UNEP and was being used in a number of developing countries. That database could determine the environmental impact of specific technologies and scenarios. The UNEP strategy for 1992 was to strengthen national and regional capabilities for dealing with the environmental issues related to energy production and consumption. A broad authoritative study on the environmental impact of renewable energy technologies was under consideration. Little had been done to study the environmental impact. Although their impact was less than that of conventional energy sources, it was an important area of study.

16. The representative of the World Meteorological Organization (WMO) pointed to the close relationship between environment and development, which had been recognized in 1981, when the Nairobi Programme of Action had been formulated. New concerns, such as air and water pollution, the greenhouse effect, acid precipitation and land degradation were growing and should be properly addressed. WMO had a responsibility to function as a "scientific voice" in promoting environmentally sound technologies. Assessment of new and renewable sources of energy should be very closely related to concerns for the environment. As energy issues were closely related to climate change and the impact of the development and utilization of energy sources on the environment was direct, they had been given priority consideration. Among detrimental consequences were air and water pollution and land degradation. The second World Climate Conference had considered assessments of the promotion of new and renewable sources of energy to reduce environmental impacts.

17. The representative of the United Nations University (UNU), said that the University had an active programme in the energy field, especially for rural communities.

18. Extensive research and development in both developed and developing countries had led to the emergence of successful practical technologies. Several years of experience had been accumulated for many technologies which should be considered for utilization in isolated areas where the cost of conventional energy sources was less competitive. Research and training institutes on new and renewable sources of energy were already operating in many countries.

19. The representative of the United Nations Centre for Human Settlements (Habitat) said that the Centre had long been concerned with household energy use. In a report to the second session of the Preparatory Committee for the United Nations Conference on Environment and Development, it had recommended to developing countries that national action programmes promote

agricultural-waste and biomass energy and reforestation; large-scale dissemination of mature renewable energy technologies through fiscal measures and technology-transfer mechanisms; building codes and regulations that encouraged the use of low-energy and locally produced materials; and training programmes directed at manufacturers and users to introduce energy-saving techniques and appliances.

20. Excessive use by developed countries of non-renewable resources and consequent contribution to "greenhouse gases" were a result of transport energy demand. Energy-conservation measures were urgently needed. Habitat recommended conservation measures such as district heating and cooling, improved insulation and increased use of renewable energy in households. In the transport sector, it recommended increasing charges on car use through road and petroleum taxes; stringent auto pollution transportation. Cooperation in the fields of conservation, energy pricing and taxation should also be developed. Habitat also recommended that international organizations assist in preparing resource-management programmes, provide assistance to developing countries to apply solar, hydropower, wind and biomass technologies and promote transfer of technology. The international community should also provide developing countries with access to research and development results to increase energy efficiency.

21. The representative of the United Nations Industrial Development Organization (UNIDO), recognized the close relationship between energy, industry and environment. The medium-term plan of UNIDO stressed the energy needs of industry, and many projects focused on technical activities and promotional assistance in the field of production, distribution, use and conservation of energy. UNIDO had promoted a consultative group on solar energy, established in 1986, recognizing that investment in solar energy research should not fluctuate with the price of oil. Solar energy could be of great benefit to developing countries. A centre to develop products related to solar energy use in developing countries had been established.

22. Hydrogen was a clean source of energy that was being developed by many industrialized countries. UNIDO had prepared a feasibility report on setting up a centre on "solar" hydrogen. Small-scale hydropower was also an important energy source, and UNIDO had worked to develop it in Latin America, Africa and Asia. The organization had established a small hydropower network in China, which would be upgraded into an international centre. UNIDO was concerned with developing equipment and products to produce, distribute and use renewable sources of energy since those sources did not easily lend themselves to popular use.

23. The representative of the United Nations Development Programme (UNDP) said that projects funded by the UNDP Energy Account had met with both success and failure. The reasons for the unsuccessful projects could be attributed to the following: (i) many projects were designed to promote certain renewable energy technologies; as the bulk of the population in the developing countries lived in rural areas the needs that had to be met within the rural development process should be identified to find out how some of them could be met through

the utilization of new and renewable sources of energy; (ii) at times technology had been introduced in the rural areas with very little involvement by the recipients, which had resulted in projects failing. Full involvement of the recipients since the inception of the project should be solicited.

24. The UNDP Energy Account had funded several demonstration projects in new and renewable sources of energy since the Nairobi Conference in 1981 but there had been very little follow-up, even in cases when projects had proved technically feasible and economically viable. Consequently, in order to promote follow-up of successful projects, UNDP suggested that the problems regarding barriers to commercialization/dissemination of proved technologies to harness new and renewable sources of energy be addressed and measures suggested to remove those barriers. As the lead agency for preparing such a document, UNDP had obtained the collaboration of the United States Department of Energy and the Government of France.

25. In addition, UNDP, together with the United States Department of Energy, the Government of the Netherlands and the World Bank, was participating in the financing of energy aimed at the commercialization of technologies to harness new and renewable sources of energy and the promotion of energy-efficiency measures. Within that programme, market studies and business plans for Indonesia, Malaysia, the Philippines and Thailand had been prepared and discussed and the World Bank had agreed to consider loans for projects under FINESSE as part of an energy sector loan to a particular country, initially in the Asia region.

26. The representative of the United Nations Centre for Science and Technology for Development, said that, at a meeting on photovoltaic energy held in Brazil in 1991, the prospects for mass-producing photovoltaic systems had been considered. Discussion centred on how photovoltaics could reach a stage at which they could supply energy to rural areas of developing countries at a commercial level. The meeting had produced a declaration on photovoltaics. It had recommended that 1 million photovoltaic systems be installed by 1995 to improve the lives of 1 per cent of the world's rural poor and that they be expanded to cover 10 per cent of the rural poor by the end of the century. An international working commission should be created to develop a goal-oriented plan to commercialize photovoltaic systems. Although it appeared that few developing countries were able to integrate photovoltaic systems, some countries, such as China and India, had adopted relevant technologies. The key to implementing environmentally sound photovoltaic technologies was the production of solar cell systems.